



UNDERSTANDING, ACCELERATED

AirPro™

# AIRPRO™ AIR VELOCITY INSTRUMENTS

MOBILE APP, FEATURE SETS, VELOCITY METER, AND MEASUREMENT PROBES

AirPro™ Air Velocity Instruments are rugged, compact, configurable and highly accurate measurement devices featuring a Velocity Meter (AP500), Mobile Application Software, user-defined Measurement Probes (VT-S, VT-A, VTH-S, VTH-A and TH-S) and Feature Sets (Basic, Advanced and Professional).

Measurements are taken via trusted thermohygrometer or thermoanemometer technology, displayed locally at the meter and simultaneously transmitted, via Bluetooth®, to your mobile Android or iOS handheld device for use with AirPro Mobile Application Software. Instrument features are enabled remotely based on user preference and subscription level.

## Applications

- + HVAC testing and balancing
- + Clean room testing
- + Biological safety cabinet and laboratory fume hood testing
- + HVAC commissioning and troubleshooting
- + Ventilation evaluations
- + Face velocity measurements

## Features and Benefits

- + Multiple plug and play probe configurations available
- + Stackable probe extensions allow for additional reach
- + High contrast display eases viewing in dimly lit areas
- + Best-in-class air velocity accuracy
- + Long life rechargeable Li-ion battery reduces cost of ownership
- + Calibration certificate included
- + True single-hand operation



# AIRPRO MOBILE (MODEL AP-MOBILE) APPLICATION SOFTWARE

The AirPro Mobile software supports both Android or iOS smart devices and is available in three levels of performance - Basic, Advanced and Professional.



## Basic:

- + Free download from App Store and Google Play
- + Auto-connect to the instrument
- + Remotely display instrument measurements
- + Set target values
- + View multiple measurements simultaneously
- + Supports multiple languages
- + Display measurements in Imperial or metric units



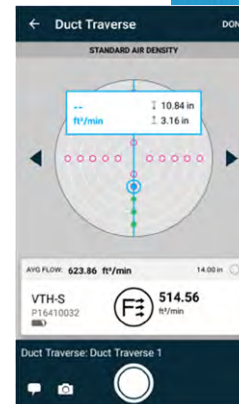
## Advanced - Includes Basic Functionality Plus:

- + Subscription-based feature set
- + Connect up to 2 instruments for simultaneous, real-time display and data logging
- + Perform flow rate calculations based on user-input duct size
- + Calculate wet bulb and dewpoint temperatures (probe dependent)
- + Log measurements to smart device
- + Export data with comments and photos for report generation



## Professional - Includes Basic and Advanced Functionality Plus:

- + Subscription-based feature set
- + Connect up to 6 instruments for simultaneous, real-time display and data logging
- + Built in duct traverse workflow supporting both Equal Area and log-Tchebycheff test methods
- + Supports an optional SD card for use in long- or short-term unattended data logging applications



Function	AirPro Feature Sets		
	Basic	Advanced (1 Year/Long-Term)	Professional (1 Year/Long-Term)
Display Multiple Measurements Simultaneously	X	X	X
Supports Multiple Languages	X	X	X
Configure for Imperial or Metric Units of Measurements	X	X	X
Volumetric Flow Rate Calculation		X	X
Standard or Actual Velocity Calculation	X	X	X
Max # of Instruments Connected to Airpro Mobile Simultaneously	1	2	6
Wet Bulb and Dewpoint Temperature Calculation (Probe Dependent)		X	X
Statistics		X	X
Data Logging		X	X
Export Data		X	X
Enable Utilization of Instruments SD Card Slot for Data Storage			X
Graphing			X
Duct Traverse Application			X
Online Access to Calibration Certificates			X

# AIRPRO METER AND MEASUREMENT PROBES

## (MODELS AP500, VT-S, VT-A, VTH-S, VTH-A AND TH-S)

### Model AP500 Includes:

Instrument, calibration certificate, quick start guide, universal AC/DC adapter, battery, service and registration cards.



### Thermoanemometers

- VT-S Air Velocity and Temperature - Straight Probe
- VT-A Air Velocity and Temperature - Articulated Probe
- VTH-S Air Velocity, Temperature, and Humidity - Straight Probe
- VTH-A Air Velocity, Temperature, and Humidity - Articulated Probe

\* All probes include calibration certificate and protective case



### Thermo hygrometer

- TH-S Temperature and Humidity - Straight Probe

\* Includes calibration certificate and protective case



### Accessories

- 800529 AP500 Probe Extension - 12 in. (305mm), quantity (1)
- 800534 Small carrying case; capable of holding one meter, 1 probe, 3 extensions plus accessories.
- 800535 Large carrying case; capable of holding 2 meters, 2 probes, 3 extensions plus accessories.
- 800530 External battery charger
- 634650002 Duct plug, 3/8" (9.5 mm) diameter - 1000 pieces
- 634650003 Duct plug, 3/8" (9.5 mm) diameter - 5000 pieces



## SPECIFICATIONS

### AIRPRO™ AIR VELOCITY INSTRUMENTS

#### MODEL AP500, VT-S, VT-A, VTH-S, VTH-A, AND TH-S

#### MODEL AP500

##### Barometric Pressure

Range	20.36 to 36.65 in. Hg (517.1 to 930.9 mm Hg)
Accuracy	±2% of reading

##### Instrument Temperature Range

Operating (Electronics)	40 to 113°F (5 to 45°C)
Storage	-4 to 140°F (-20 to 60°C)

##### Display interface

Organic light-emitting diode (OLED)  
0.4 in. (10 mm) digit height

##### External Meter Dimensions

2.1 in. x 8.5 in. x 1.6 in. (53 mm x 181 mm x 40 mm)

##### Meter Weight with Batteries

0.5 lbs. (0.23 kg)

##### Power Requirements

AirPro Li-ion battery	3500 mAh
AC Adapter (TSI part number 800531 only)	
Input	90 to 240 VAC, 50 to 60 Hz
Output	5 VDC, 2A

##### Battery Life

8+ hours at 100 ft/min (0.5 m/s) and 77°F (25°C)

#### AIRPRO MEASUREMENT PROBES

##### Velocity (VT-S, VT-A, VTH-S, VTH-A)

Range	0 to 6,000 ft/min (0 to 30 m/s)
Accuracy <sup>1&amp;2</sup>	±3% of reading or ±3 ft/min (±0.015 m/s), whichever is greater
Resolution	1 ft/min (0.01 m/s)

##### Temperature (VT-S, VT-A, VTH-S, VTH-A, TH-S)

Range	14 to 150°F (-10 to 65°C)
Accuracy <sup>3</sup>	±0.5°F (±0.3°C)
Resolution	0.1°F (0.1°C)

##### Relative Humidity (VTH-S, VTH-A, TH-S)

Range	5 to 95% RH
Accuracy <sup>4</sup>	±3% RH
Range	0.1% RH

##### Straight Probe Dimensions (VT-S, VTH-S, TH-S)

Probe length	12 in. (305 mm)
Probe diameter (largest)	0.375 in. (9.5 mm)

##### Articulating Probe Dimensions (VT-A, VTH-A)

Probe length	12 in. (305 mm)
Probe diameter (largest)	0.375 in. (9.5 mm)
Articulating section length	6.0 in (15.24 cm)

##### Probe Extension Dimensions (800529)

Probe length	12 in. (305 mm)
Probe diameter (largest)	0.375 in. (9.5 mm)

<sup>1</sup> Temperature compensated over an air temperature range of 40 to 150°F (5 to 65°C).

<sup>2</sup> The accuracy statement begins at 30 ft/min through 6,000 ft/min (0.15 m/s through 30 m/s).

<sup>3</sup> Accuracy with instrument case at 77°F (25°C), add uncertainty of 0.05°F/°F (0.03°C/°C) for change in instrument temperature.

<sup>4</sup> Accuracy with probe at 77°F (25°C). Add uncertainty of 0.1% RH/°F (0.2% RH/°C) for change in probe temperature. Includes 1% hysteresis.

Specifications are subject to change without notice.

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